

thereto without departing from the spirit and scope of the invention as set forth in the hereafter appended claims.

ABSTRACT OF THE DISCLOSURE

5 A method for controlling the distribution of transmission rates in a cellular radiotelecommunication system wherein, in order to support the effective utilization of types of time slot in wireless telecommunication systems, e.g. the DECT-specific "Full" or "Double Slots", two fixed parts are provided for each radio cell. The first fixed parts in each case support two types of time slot but signal in dependence on the capacity utilization of the second fixed parts, which only support one type of
10 time slot, that they support the second or the first and second type of time slot. The portable parts store the fixed parts, after they have signaled their support of types of time slot, in separate lists.

IN THE CLAIMS

On page 11, cancel line 1, and substitute the following left-hand justified
15 heading therefor:

CLAIMS

Please cancel claims 1-20, without prejudice, and substitute the following claims therefor:

21. A method for controlling a distribution of transmission rates in a
20 cellular radiotelecommunication system, the method comprising the steps of:
operating, in at least one radio cell of the radiotelecommunication system, at least two fixed parts and at least one portable part for purposes of wireless telecommunication;
supporting, via a first of the at least two fixed parts, both a first transmission
25 mode in which a first service is transmitted at a first transmission rate and a second transmission mode in which a second service is transmitted at a second transmission rate;
supporting, via a second of the at least two fixed parts, the first transmission mode in which the first service is transmitted at the first transmission rate;

signaling to the at least one portable part, via the first fixed part and in dependence on a traffic load carried by the second fixed part, in a first system information item that the first fixed part supports the second transmission mode and, possibly, also the first transmission mode; and

- 5 signaling to the at least one portable part, via the second fixed part, in a second system information item that the second fixed part supports the first transmission mode.

22. A method for controlling a distribution of transmission rates in a
10 cellular radiotelecommunication system as claimed in claim 21, the method further comprising the steps of:

- supporting, via the at least one portable part, both the first transmission mode in which the first service is transmitted at the first transmission rate, and the second transmission mode in which the second service is transmitted at the second
15 transmission rate;

 storing connection-related data in at least one memory via the at least one portable part;

- storing primary data records in the form of a first list in the memory, via the at least one portable part, when the fixed parts signal in the system information
20 items that the fixed parts support the first transmission mode;

 storing secondary data records in the form of a second list in the memory, via the at least one portable part, when the fixed parts signal in the system information items that the fixed parts support the second transmission mode; and

- updating both the first list and the second list, via the at least one portable
25 part, in case of a change in system information from the fixed parts.

23. A method for controlling a distribution of transmission rates in a cellular radiotelecommunication system as claimed in claim 21, the method further comprising the steps of:

comparing a value of a current capacity utilization with threshold values via the second fixed part;

5 sending to the first fixed part, via the second fixed part, a first signaling information item when the value of the current capacity utilization is greater than or equal to a first threshold value;

sending to the first fixed part, via the second part, a second signaling information item when the value of the current capacity utilization is less than or equal to a second threshold value;

10 signaling, via the first fixed part, between receiving the first and the second signaling information items, to the at least one portable part in the first system information item that the first fixed part supports both the first transmission mode and the second transmission mode; and

15 signaling, via the first fixed part, between receiving the second and the first signaling information items, to the at least one portable part in the first system information item that the first fixed part supports the second transmission mode and, possibly, the first transmission mode.

24. A method for controlling a distribution of transmission rates in a cellular radiotelecommunication system as claimed in claim 21, the method further comprising the steps of:

20 comparing a value of a current capacity utilization with threshold values via the second fixed part;

25 sending to a higher-level controller, via the second fixed part, a first signaling information item when the value of the current capacity utilization is greater to or equal to a first threshold value;

sending to the higher-level controller, via the second fixed part, a second signaling information item when the value of the current capacity utilization is less than or equal to a second threshold value;

30 controlling the first fixed part, via the higher-level controller, between receiving the first and the second signaling information items, such that the first

fixed part signals to the at least one portable part in the first system information item that the first fixed part supports the first transmission mode and the second transmission mode;

controlling the first fixed part, via the higher-level controller, between
5 receiving the second and the first signaling information items, such that the first fixed part signals to the at least one portable part in the first system information item that the first fixed part supports the second transmission mode and, possibly, the first transmission mode.

10 25. A method for controlling a distribution of transmission rates in a cellular radiotelecommunication system as claimed in claim 23, the method further comprising the step of:

exchanging telecommunication connections between the at least one portable part and the first fixed part, in which the first transmission mode is used,
15 via a handover by corresponding telecommunication connections between the at least one portable part and the second fixed part.

26. A method for controlling a distribution of transmission rates in a cellular radiotelecommunication system as claimed in claim 25, wherein the
20 telecommunication connections are exchanged when the second signaling information item is received, the telecommunication connections are exchanged automatically, and the exchange of telecommunication connections is ended, at the latest, after the first signaling information item has been received.

25 27. A method for controlling a distribution of transmission rates in a cellular radio telecommunication system as claimed in claim 26, wherein the at least one portable part initiates the exchange of, and exchanges, the telecommunication connections.

28. A method for controlling a distribution of transmission rates in a cellular radiotelecommunication system as claimed in claim 26, wherein the fixed parts initiate the exchange of, and exchange, the telecommunication connections.

5 29. A method for controlling a distribution of transmission rates in a cellular radiotelecommunication system as claimed in claim 24, the method further comprising the step of:

exchanging telecommunication connections between the at least one portable part and the first fixed part, in which the first transmission mode is used,
10 via a handover by corresponding telecommunication connections between the at least one portable part and the second fixed part.

30. A method for controlling a distribution of transmission rates in a cellular radiotelecommunication system as claimed in claim 29, wherein the
15 telecommunication connections are exchanged when the second signaling information item is received, the telecommunication connections are exchanged automatically, and the exchange of telecommunication connections is ended, at the latest, after the first signaling information item has been received.

20 31. A method for controlling a distribution of transmission rates in a cellular radiotelecommunication system as claimed in claim 30, wherein the higher-level controller initiates the exchange of, and exchanges, at the telecommunication connections.

25 32. A method for controlling a distribution of transmission rates in a cellular radiotelecommunication system as claimed in claim 25, wherein the telecommunication connections are exchanged in an iterative process.

33. A method for controlling a distribution of transmission rates in a cellular radiotelecommunication system as claimed in claim 25, the method further comprising the steps of:

5 signaling to the first fixed part a particular number of connections which can be handed over to the second fixed part without exceeding the first threshold value; and

handing over, in one step, from the first fixed part to the second fixed part, the particular number of connections.

10 34. A method for controlling a distribution of transmission rates in a cellular radiotelecommunication system as claimed in claim 32, the method further comprising the step of:

15 signaling, from the second fixed part to the first fixed part, a number of connections exchanged.

35. A method for controlling a distribution of transmission rates in a cellular radiotelecommunication system as claimed in claim 29, wherein the telecommunication connections are exchanged in an iterative process.

20 36. A method for controlling a distribution of transmission rates in a cellular radiotelecommunication system as claimed in claim 35, the method further comprising the steps of:

signaling the number of connections to the higher-level controller via the second fixed part; and

25 signaling the number of connections to the first fixed part via the higher-level controller.

37. A method for controlling a distribution of transmission rates in a cellular radiotelecommunication system as claimed in claim 23, wherein an

absolute value of the second threshold value is equal to an absolute value of the first threshold value.

38. A method for controlling a distribution of transmission rates in a
5 cellular radiotelecommunication system as claimed in claim 23, wherein an
absolute value of the second threshold value is smaller than an absolute value of the
first threshold value.

39. A method for controlling a distribution of transmission rates in a
10 cellular radiotelecommunication system as claimed in claim 21, wherein signals are
transmitted at 32 kbit/s per second via the first transmission rate and at 64 kbit/s per
second via the second transmission rate.

40. A method for controlling a distribution of transmission rates in a
15 cellular radiotelecommunication system as claimed in claim 21, wherein voice is
transmitted via the first service and packet data is transmitted via the second
service.

41. A method for controlling a distribution of transmission rates in a
20 cellular radiotelecommunication system as claimed in claim 21, wherein the at least
one portable part is a wireless portable part.

42. A method for controlling a distribution of transmission rates in a
cellular radiotelecommunication system as claimed in claim 21, wherein the at least
25 one portable part is a wireless radio network termination.

43. A method for controlling a distribution of transmission rates in a
cellular radiotelecommunication system as claimed in claim 21, wherein the
radiotelecommunication system operates in accordance with a DECT standard.